

REMARKS/ARGUMENTS

Claims 1 and 3-11 are present in this application. By this Amendment, claims 1 and 3-11 have been amended, and claim 2 has been canceled. Reconsideration in view of the above amendments and the following remarks is respectfully requested.

Claims 1-3 and 5-7 were rejected under 35 U.S.C. §102(b) over U.S. Published Patent Application No. 2001/0027949 to Safir. This rejection is respectfully traversed.

Claim 1 has been amended to more clearly specify the type of connection of the automatic sampler and to clarify that the sampler is not connected to a pump or detector commonly used as “an instrument for chromatographic analysis.” Safir relates to liquid chromatography and discloses a method and an apparatus for the rapid characterization of polymers by chromatographic techniques. Automated polymer sampling allows fast sampling rates in sequences.

Figs. 7A and 7B (see also paragraph [0172]) relate to a rapid serial detection in a single step process. Two microprocessors (350, 352) control a flow injection system enabling “high-throughput rapid-serial detection.” The system comprises an autosampler (200), a column (214), a valve (210), two detectors (216, 218) (for determining two different properties for the same sample), a valve controller (360), and a data acquisition module (364). Upon injecting the sample, the valve controller (360) sends a signal to the data acquisition module (364), thus computer (350) initiates acquiring data from the detectors (216, 218). Computer (350) initiates a new acquisition of data for the next sample, when it receives a new injection pulse from computer (352).

Safir, however, does not describe the features of the invention defined in claim 1. In particular, Safir lacks the claimed automatic sampler interfaced with two or more independent

data systems for data acquisition and processing, wherein said data systems serve each of at least two chromatographic analysis systems selected from gas chromatographic systems (GC) and/or liquid chromatographic systems (LC). In fact, Figs. 7A and 7B in Safir show analytical systems for determination of proteins by using an automatic sampler, however, the sampler is not interfaced with at least two data systems serving each of at least two chromatographic analysis systems, selected from gas chromatographic system and liquid chromatographic systems.

The automatic sampler defined in amended claim 1 allows an increase in the usage time of the sampler, i.e., to render it active during the whole chromatographic analysis time.

Safir aims to provide methods and apparatus for the rapid characterization or screening of polymers by chromatographic techniques and related flow-injection analysis techniques by employing optical detection methods. According to Safir, one or two microprocessors control the analytical system, the sampling with autosampler, the injection of samples into the mobile phase, the pump, and the acquisitions of data from the detectors. Safir is silent about the use of different sampling sequences on at least two chromatographic analytical systems selected from gas chromatographic systems and liquid chromatographic systems, by using a single automatic sampler controlled by at least two data systems.

Since at least this subject matter is lacking in Safir, Applicant respectfully submits that the rejection is misplaced.

With regard to dependent claims 2, 3 and 5-7, Applicant submits that these claims are allowable at least by virtue of their dependency on an allowable independent claim.

Reconsideration and withdrawal of the rejection are respectfully requested.

Claims 1-3 and 5-11 were rejected under 35 U.S.C. §102(b) over U.S. Published Patent Application No. 2002/0068366 to LaDine. This rejection is respectfully traversed.

LaDine discloses an accurate and rapid analysis of a large sample of proteins in a biological system by means of using liquid chromatography and mass spectrometry. Lysate samples are divided into six portions placed in holders by an automatic device. The protein samples are separated, then the obtained subsamples (12-13) are refractionated. The subfraction samples (22-25) are analyzed in parallel in a coordinated array (12) of multiple mass spectrometry systems (33-37). A central computer collects the data from the spectrometer array as a function time (see Figs. 1 and 2). Figs. 3 and 4 show an array of spectrometry systems (33-37) and an array of sample separation devices (28-32). These arrays communicate through links (16, 17) with the central processor (14), which sends control information to direct the function of any sample separation/fractionation device or mass spectrometry system and receives back sample identity and sample analysis results for collation. The mass spectrometer is a tandem mass spectrometer coupled to a liquid chromatograph (LC-TMS).

LaDine similarly does not disclose the noted features of amended claim 1. Rather, LaDine teaches to carry out parallel protein analysis by means of an array of mass spectrometry system and an array of sample preparation devices. LaDine also does not disclose the use of a single automatic sampler which distributes different samples into different chromatographic systems (GC or LC) according to different sequences (first sampling sequence, second sampling sequence . . . nth sampling sequence) as defined in claim 8.

Applicant thus respectfully submits that this rejection is also misplaced.

With regard to the dependent claims, Applicant submits that these claims are allowable at least by virtue of their dependency on an allowable independent claim.

Reconsideration and withdrawal of the rejection are respectfully requested.

Claim 4 was rejected under 35 U.S.C. §103(a) over Safir or LaDine. Without conceding this rejection, Applicant submits that neither Safir nor LaDine provides any suggestion to modify its structure to correct those deficiencies noted above with regard to claim 1. As such, Applicant submits that dependent claim 4 is allowable at least by virtue of its dependency on an allowable independent claim. Withdrawal of the rejections is respectfully requested.

A Form PTO/SB/08 is attached listing an article cited in the International Search Report. Although the Search Report was included in a previously-filed Form PTO/SB/08 along with an Information Disclosure Statement, the Search Report was not initialed by the Examiner. The Form PTO/SB/08 submitted herewith is provided for the Examiner's convenience. Applicant requests that the Examiner initial the form to indicate consideration of the Search Report and the article.

In view of the foregoing amendments and remarks, Applicant respectfully submits that the claims are patentable over the art of record and that the application is in condition for allowance. Should the Examiner believe that anything further is desirable in order to place the application in condition for allowance, the Examiner is invited to contact Applicant's undersigned attorney at the telephone number listed below.

Prompt passage to issuance is earnestly solicited.

ZILIOLI
Appl. No. 10/591,840
January 21, 2009

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: /Alan M. Kagen/
 Alan M. Kagen
 Reg. No. 36,178

AMK:jls
901 North Glebe Road, 11th Floor
Arlington, VA 22203-1808
Telephone: (703) 816-4000
Facsimile: (703) 816-4100